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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Junji Takai

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MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER

KHAN, USMAN A

ART UNIT

PAPER NUMBER

2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/786,897	Applicant(s) TAKAI, JUNJI	
	Examiner Usman Khan	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004 and 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 07/28/2004 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 – 7 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 5 – 7 the first instance of “unit” is not defined properly since there are multiple units in the claim and the first instance of “unit”

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in each claim fails to particularly point out the exact unit being claimed. The same holds true in claim 20 for the second and fifth instance of "unit" in the claim.

Claim 19 recite the limitations "said sound production unit" and "said indicator unit". The terms "sound production unit" and "indicator unit" are not discussed earlier in the claim nor is it discussed in the independent claim that it depends from. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 - 15, 18, and 20 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art in further view of Ogawa (US patent No. 6,031,999).

Regarding **claim 1**, Applicants Admitted Prior Art discloses a designation unit configured to designate a shift to a cleaning mode to remove a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1).

However, Applicants Admitted Prior Art fails to disclose an image sensing apparatus for capturing an image of object by an image sensing element, comprising: power supply unit configured to supply an electric power to the image sensing apparatus; detection unit configured to detect an electric power supplied from said power supply unit; and warning issuance unit configured to issue a warning in a case where the electric power detected by said detection unit declines to a first predetermined value or less. Warning issuance unit configured to issue a warning during execution of the cleaning mode designated by said designation unit. Ogawa, on the other hand discloses an image sensing apparatus for capturing an image of object by an image sensing element, comprising: power supply unit configured to supply an electric power to the image sensing apparatus; detection unit configured to detect an electric power supplied from said power supply unit; and warning issuance unit configured to issue a warning in a case where the electric power detected by said detection unit declines to a first predetermined value or less. Warning issuance unit configured to issue a warning during execution of the cleaning mode designated by said designation unit

More specifically, Ogawa discloses an image sensing apparatus for capturing an image of object by an image sensing element (figure 1, items 2 and 7), comprising: power supply unit configured to supply an electric power to the image sensing apparatus (figure 1, item 9); detection unit configured to detect an electric power supplied from said power supply unit (figures 2 - 3); and warning issuance unit configured to issue a warning in a case where the electric power detected by said

detection unit declines to a first predetermined value or less (figures 2 - 3, set prohibiting flags based on the battery power level). Warning issuance unit configured to issue a warning during execution of the cleaning mode designated by said designation unit (When Ogawa is combined with Applicants Admitted Prior Art teaches that a cleaning mode can be controlled by the detection unit as shown in figures 2 – 3 of Ogawa and column 1 lines 63 *et seq.* to have a further power saving device wherein the prohibition flag will be issued if the power of the camera is in some threshold for the cleaning mode the cleaning mode will give the camera the advantage of having improved image quality by allowing the image pickup unit to be cleaned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 2**, as mentioned above in the discussion of claim 1, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a termination unit configured to forcefully terminate the cleaning mode in a case where the electric power detected by said detection unit declines to a second predetermined value or less, which is a smaller value than the first predetermined value (figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3

line 8 – page 4 line 1), during execution of the cleaning mode (figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 3**, as mentioned above in the discussion of claim 1, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a prohibition unit configured to prohibit the shift to the cleaning mode in response to designation by said designation unit in a case where the electric power detected by said detection unit is the first predetermined value or less (figures 2 – 3 of Ogawa teaches a prohibition of devices based on battery level also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa

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teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 4**, Applicants Admitted Prior Art discloses a single lens reflex image sensing apparatus for capturing an image of object by an image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1), comprising: designation unit configured to designate a shift to a cleaning mode to remove a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1); cleaning mode setting unit configured to set the cleaning mode by moving up a mirror for the single lens reflex and making a shutter front curtain to travel (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state).

However, Applicants Admitted Prior Art fails to disclose an image sensing apparatus further comprises a power supply unit configured to supply electric power to the image sensing apparatus; detection unit configured to detect an electric power supplied from said power supply unit and warning issuance unit configured to issue a warning in a case where the electric power detected by said detection unit declines to a first predetermined value or less in a state where the cleaning mode is set by said cleaning mode setting unit in accordance with designation of said designation unit. Ogawa, on the other hand discloses an image sensing apparatus further comprises a power supply unit configured to supply electric power to the image sensing apparatus; detection unit configured to detect an electric power supplied from said power supply

unit and warning issuance unit configured to issue a warning in a case where the electric power detected by said detection unit declines to a first predetermined value or less in a state where the cleaning mode is set by said cleaning mode setting unit in accordance with designation of said designation unit.

More specifically, Ogawa discloses an image sensing apparatus further comprises a power supply unit configured to supply electric power to the image sensing apparatus (figure 1, item 9); detection unit configured to detect an electric power supplied from said power supply unit (figures 2 - 3) and warning issuance unit configured to issue a warning in a case where the electric power detected by said detection unit declines to a first predetermined value or less (figures 2 - 3, set prohibiting flags based on the battery power level) in a state where the cleaning mode is set by said cleaning mode setting unit in accordance with designation of said designation unit (When Ogawa is combined with Applicants Admitted Prior Art a cleaning mode can be controlled by the detection unit as shown in figures 2 - 3 of Ogawa and column 1 lines 63 *et seq.* to have a further power saving device wherein the prohibition flag will be issued if the power of the camera is in some threshold for the cleaning mode the cleaning mode will give the camera the advantage of having improved image quality by allowing the image pickup unit to be cleaned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 - column 2 line 67 Ogawa

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teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 5**, as mentioned above in the discussion of claim 4, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches unit configured to move down the mirror in a case where the electric power detected by said detection unit declines to a second predetermined value or less (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; not in bulb state), which is a smaller value than the first predetermined value, during execution of the cleaning mode (figures 2 – 3 of Ogawa teaches a prohibition of devices based on battery level also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 in the bulb state off when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 6**, as mentioned above in the discussion of claim 4, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Applicants Admitted Prior Art teaches a unit configured to make a

shutter rear curtain to travel when the cleaning mode is terminated (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 7**, as mentioned above in the discussion of claim 4, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a unit configured to prohibit said cleaning mode setting unit from setting the cleaning mode in response to designation by said designation unit in a case where the electric power detected by said detection unit is the first predetermined value or less (figures 2 – 3 of Ogawa teaches a prohibition of devices based on battery level also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 8**, Applicants Admitted Prior Art discloses a control method of an image sensing apparatus for capturing an image of object by an image sensing element, comprising: a detection step of detecting electric power supplied to the image sensing apparatus (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1); a designation step of designating a shift to a cleaning mode to remove a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1);

However, Applicants Admitted Prior Art fails to disclose a warning issuance step of issuing a warning in a case where the electric power detected in said detection step declines to a first predetermined value or less during execution of the cleaning mode designated in said designation step. Ogawa, on the other hand discloses a warning issuance step of issuing a warning in a case where the electric power detected in said detection step declines to a first predetermined value or less during execution of the cleaning mode designated in said designation step.

More specifically, Ogawa discloses a warning issuance step of issuing a warning in a case where the electric power detected in said detection step declines to a first predetermined value or less during execution of the cleaning mode designated in said designation step (figures 2 - 3, set prohibiting flags based on the battery power level) in a state where the cleaning mode is set by said cleaning mode setting unit in accordance with designation of said designation unit (When Ogawa is combined with Applicants Admitted Prior Art a cleaning mode can be controlled by the detection unit as shown in

figures 2 – 3 of Ogawa and column 1 lines 63 *et seq.* to have a further power saving device wherein the prohibition flag will be issued if the power of the camera is in some threshold for the cleaning mode the cleaning mode will give the camera the advantage of having improved image quality by allowing the image pickup unit to be cleaned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 9**, as mentioned above in the discussion of claim 8, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a termination step of forcefully terminating the cleaning mode in a case where the electric power detected in said detection step declines to a second predetermined value or less (figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1), which is a smaller value than the first predetermined value, during execution of the cleaning mode (figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings

of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 10**, as mentioned above in the discussion of claim 8, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches (figures 2 – 3 of Ogawa teaches a prohibition of devices based on battery level also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 11**, Applicants Admitted Prior Art discloses a single lens reflex image sensing apparatus for capturing an image of object by an image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1), comprising: a designation step of designating a shift to a cleaning mode to remove a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1); a

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cleaning mode setting step of setting the cleaning mode by moving up a mirror for the single lens reflex and making a shutter front curtain to travel (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state).

However, Applicants Admitted Prior Art fails to disclose a detection step of detecting electric power supplied to the image sensing apparatus; and a warning issuance step of issuing a warning in a case where the electric power detected in said detection step declines to a first predetermined value or less in a state where the cleaning mode is set in said cleaning mode setting step in accordance with designation in said designation step. Ogawa, on the other hand discloses a detection step of detecting electric power supplied to the image sensing apparatus; and a warning issuance step of issuing a warning in a case where the electric power detected in said detection step declines to a first predetermined value or less in a state where the cleaning mode is set in said cleaning mode setting step in accordance with designation in said designation step.

More specifically, Ogawa discloses an image sensing apparatus further comprises a detection step of detecting electric power supplied to the image sensing apparatus (figure 1, item 9); and a warning issuance step of issuing a warning in a case where the electric power detected in said detection step declines to a first predetermined value or less (figures 2 - 3, set prohibiting flags based on the battery power level) in a state where the cleaning mode is set in said cleaning mode setting step in accordance with designation in said designation step (When Ogawa is combined with Applicants Admitted Prior Art a cleaning mode can be controlled by the detection

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unit as shown in figures 2 – 3 of Ogawa and column 1 lines 63 *et seq.* to have a further power saving device wherein the prohibition flag will be issued if the power of the camera is in some threshold for the cleaning mode the cleaning mode will give the camera the advantage of having improved image quality by allowing the image pickup unit to be cleaned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 12**, as mentioned above in the discussion of claim 11, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a termination step of forcefully terminating the cleaning mode by moving down the mirror in a case where the electric power detected in said detection step declines to a second predetermined value or less (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; not in bulb state), which is a smaller value than the first predetermined value (figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1), during execution of the cleaning mode (figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 13**, as mentioned above in the discussion of claim 11, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Applicants Admitted Prior Art teaches a step of making a shutter rear curtain to travel when the cleaning mode is terminated (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 14**, as mentioned above in the discussion of claim 11, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a step of prohibiting setting of the cleaning mode in said cleaning mode setting step in response to designation of said designation step in a case where the electric power

detected in said detection step is the first predetermined value or less (figures 2 – 3 of Ogawa teaches a prohibition of devices based on battery level also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 15**, Applicants Admitted Prior Art discloses an image sensing apparatus (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1) comprising: an image sensing element for sensing an object of shooting (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1); control unit configured to cause a shift to a cleaning mode to remove a foreign substance in a neighborhood of and on a photoreceptive surface of said image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1);

However, Applicants Admitted Prior Art fails to disclose an image sensing apparatus further comprises a power supply unit configured to supply electric power; detection unit configured to detect an electric power level supplied from said power supply unit during the cleaning mode; and warning unit configured to issue a warning to terminate the cleaning mode in accordance with a detection result of said detection unit.

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Ogawa, on the other hand discloses an image sensing apparatus further comprises a power supply unit configured to supply electric power; detection unit configured to detect an electric power level supplied from said power supply unit during the cleaning mode; and warning unit configured to issue a warning to terminate the cleaning mode in accordance with a detection result of said detection unit.

More specifically, Ogawa discloses an image sensing apparatus further comprises a power supply unit configured to supply electric power (figure 1, item 9); detection unit configured to detect an electric power level supplied from said power supply unit during the cleaning mode (figures 2 - 3 of Ogawa when combined with Applicants Admitted Prior Art); and warning unit configured to issue a warning to terminate the cleaning mode in accordance with a detection result of said detection unit (figures 2 - 3, set prohibiting flags based on the battery power level also When Ogawa is combined with Applicants Admitted Prior Art a cleaning mode can be controlled by the detection unit as shown in figures 2 - 3 of Ogawa and column 1 lines 63 *et seq.* to have a further power saving device wherein the prohibition flag will be issued if the power of the camera is in some threshold for the cleaning mode the cleaning mode will give the camera the advantage of having improved image quality by allowing the image pickup unit to be cleaned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa

teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 18**, as mentioned above in the discussion of claim 15, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim. Additionally, Ogawa in further view of Applicants Admitted Prior Art teaches a mirror moving unit configured to position a mirror arranged on an image sensing optical axis to a first state at the time of non-photographing state so as to introduce an object image to an optical finder (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state), and positioning the mirror to a second state at the time of photographing so as to evacuate the mirror from the image sensing optical axis (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; not in bulb state), wherein said warning unit issues a warning by moving the mirror from the second state to the first state using said mirror moving unit (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 20**, Applicants Admitted Prior Art discloses a single lens reflex image sensing apparatus for capturing an image of object by an image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1), comprising: an operation unit configured to designate a cleaning mode to remove a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1); a mirror controller configured to move up/down a mirror (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; bulb state and non bulb state).

However, Applicants Admitted Prior Art fails to disclose a battery for supplying electric power; a voltage detector configured to detect an output voltage of said battery; warning unit configured to issue a warning in a case where the output voltage detected by said voltage detector declines to the first predetermined value or less during the cleaning mode; unit configured to allow removal of the foreign substance by moving up the mirror by said mirror controller in accordance with designation from said operation unit, in a case where the output voltage detected by said voltage detector is a first predetermined value or more; and unit configured to move down the mirror using said mirror controller in a case where the output voltage detected by said voltage detector declines to a second predetermined value or less, which is a smaller value than the first predetermined value, during execution of the cleaning mode. Ogawa, on the other hand discloses battery for supplying electric power; a voltage detector configured to detect an output voltage of said battery; warning unit configured to issue a warning in a case where the output voltage detected by said voltage detector declines to the first

predetermined value or less during the cleaning mode; unit configured to allow removal of the foreign substance by moving up the mirror by said mirror controller in accordance with designation from said operation unit, in a case where the output voltage detected by said voltage detector is a first predetermined value or more; and unit configured to move down the mirror using said mirror controller in a case where the output voltage detected by said voltage detector declines to a second predetermined value or less, which is a smaller value than the first predetermined value, during execution of the cleaning mode.

More specifically, Ogawa discloses a battery for supplying electric power (figure 1, item 9); a voltage detector configured to detect an output voltage of said battery (figures 2 - 3, set prohibiting flags based on the battery power level); warning unit configured to issue a warning in a case where the output voltage detected by said voltage detector declines to the first predetermined value or less during the cleaning mode (figures 2 - 3, set prohibiting flags based on the battery power level, also, when Ogawa is combined with Applicants Admitted Prior Art teaches that a cleaning mode can be controlled by the detection unit as shown in figures 2 - 3 of Ogawa and column 1 lines 63 *et seq.* to have a further power saving device wherein the prohibition flag will be issued if the power of the camera is in some threshold for the cleaning mode the cleaning mode will give the camera the advantage of having improved image quality by allowing the image pickup unit to be cleaned); unit configured to allow removal of the foreign substance by moving up the mirror by said mirror controller in accordance with designation from said operation unit, in a case where the output voltage detected by

said voltage detector is a first predetermined value or more (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1, bulb state; also figures 2 – 3 of Ogawa for triggering the bulb state); and unit configured to move down the mirror using said mirror controller in a case where the output voltage detected by said voltage detector declines to a second predetermined value or less, which is a smaller value than the first predetermined value, during execution of the cleaning mode (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1, non bulb state; also figures 2 – 3 of Ogawa for triggering the non bulb state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Regarding **claim 21**, Applicants Admitted Prior Art discloses a control method of a single lens reflex image sensing apparatus for capturing an image of object by an image sensing element, comprising: a step of allowing removal of a foreign substance by moving up a mirror (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1, bulb state);

However, Applicants Admitted Prior Art fails to disclose that the cleansing is done in a case where an output voltage of a battery is a first predetermined value or more upon designation of a cleaning mode which is provided for cleaning a foreign substance

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in a neighborhood of and on a photoreceptive surface of the image sensing element; a step of issuing a warning in a case where the output voltage of the battery declines to the first predetermined value or less during the cleaning mode; and a step of moving down the mirror in a case where the output voltage of the battery declines to a second predetermined value or less, which is a smaller value than the first predetermined value, during execution of the cleaning mode. Ogawa, on the other hand discloses that the cleansing is done in a case where an output voltage of a battery is a first predetermined value or more upon designation of a cleaning mode which is provided for cleaning a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element; a step of issuing a warning in a case where the output voltage of the battery declines to the first predetermined value or less during the cleaning mode; and a step of moving down the mirror in a case where the output voltage of the battery declines to a second predetermined value or less, which is a smaller value than the first predetermined value, during execution of the cleaning mode

More specifically, Ogawa discloses that the cleansing is done in a case where an output voltage of a battery is a first predetermined value or more upon designation of a cleaning mode which is provided for cleaning a foreign substance in a neighborhood of and on a photoreceptive surface of the image sensing element (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1, bulb state; also figures 2 – 3 of Ogawa for triggering the bulb state); a step of issuing a warning in a case where the output voltage of the battery declines to the first predetermined value or less during the cleaning mode (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1,

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non bulb state; also figures 2 – 3 of Ogawa for triggering the non bulb state); and a step of moving down the mirror in a case where the output voltage of the battery declines to a second predetermined value or less, which is a smaller value than the first predetermined value, during execution of the cleaning mode (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1, non bulb state; also figures 2 – 3 of Ogawa for triggering the non bulb state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ogawa with the teachings of Applicants Admitted Prior Art because in column 1 line 61 – column 2 line 67 Ogawa teaches that the use of the battery check device will decrease power consumption and increase the power required for essential components of the camera.

Claim 16 – 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art in further view of Ogawa in further view of Examiners Official Notice.

Regarding **claim 16**, as mentioned above in the discussion of claim 15 Applicants Admitted Prior Art in further view of Ogawa teaches all of the limitations of the parent claim.

However, Applicants Admitted Prior Art in further view of Ogawa fails to teach a sound production unit configured to generate sound, wherein said warning unit issues a warning using said sound production unit.

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The examiner takes Official Notice that it is old and well known in the art to use a sound production unit configured to generate sound, wherein a warning unit issues a warning using said sound production unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use sound production for warning unit to have an easier way of warning the user of the flags and/or battery levels as disclosed in the combination of Applicants Admitted Prior Art an Ogawa.

Regarding **claim 17**, as mentioned above in the discussion of claim 15 Applicants Admitted Prior Art in further view of Ogawa teaches all of the limitations of the parent claim.

However, Applicants Admitted Prior Art in further view of Ogawa fails to teach an indicator unit, wherein said warning unit issues a warning using said indicator unit.

The examiner takes Official Notice that it is old and well known in the art to use an indicator unit, wherein a warning unit issues a warning using said indicator unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a indicator unit, such as a displayed icon or a flashing indicator light, warning unit to have a easier way of warning the user of the flags and/or battery levels as disclosed in the combination of Applicants Admitted Prior Art a Ogawa.

Regarding **claim 19**, as mentioned above in the discussion of claim 15, Ogawa in further view of Applicants Admitted Prior Art teaches all of the limitations of the parent claim.

Additionally, Applicants Admitted Prior Art teaches warning level which issues a warning using said mirror moving unit (Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1; not in bulb state; also figures 2 – 3 of Ogawa also the cleaning mode of Applicants Admitted Prior Art US PgPub page 3 line 8 – page 4 line 1 when combined with Ogawa)

However, Applicants Admitted Prior Art in further view of Ogawa fails to teach that said warning unit includes a first warning level which issues a warning using said sound production unit or said indicator unit in accordance with the electric power level.

The examiner takes Official Notice that it is old and well known in the art to use an indicator unit or a sound production unit configured to generate sound, wherein a warning unit issues a warning using said indicator unit or said sound production unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a indicator unit, such as a displayed icon or a flashing indicator light, warning unit to have a easier way of warning the user of the flags and/or battery levels as disclosed in the combination of Applicants Admitted Prior Art a Ogawa. Also it would have been obvious to one of ordinary skill in the art at the time the invention was made to use sound production for warning unit to have an easier way of warning the user of the flags and/or battery levels as disclosed in the combination of Applicants Admitted Prior Art an Ogawa.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Niikawa (US patent No. 6,710,809) teaches a power control device with warning regions.

Hirasawa (US patent No. 5,986,706) teaches a power control device with warning regions.

Takei (US patent No. 5,757,428) teaches a power control device with warning regions.

Naito et al. (US patent No. 6,735,455) teaches a power control device with warning regions.

Ohnami et al. (US patent No. 6,023,539) teaches a power control device with warning regions.

Nagata et al. (US patent No. 5,527,630) teaches a power control device with warning regions.

Suzuki (US patent No. 6,833,866) teaches a power control device with warning regions.

Tamura et al. (US patent No. 6,771,896) teaches a power control device with warning regions.

Takahashi (US PgPub 2002/0118968) teaches a power control device.

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Naito et al. (US PgPub 2001/0005686) teaches a power control device with warning regions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Usman Khan
07/31/2007
Patent Examiner
Art Unit 2622



DAVID OMETZ
SUPERVISORY PATENT EXAMINER